Serial No. 10/808,059

LOW TEMPERATURE OXIDIZATION OF METALS

AMENDMENTS TO THE CLAIMS

- 1. (previously presented) An NROM memory transistor comprising:
 - a substrate having a plurality of source/drain regions, the source/drain regions having a different conductivity type than the remainder of the substrate;
 - a nanolaminate, high permittivity (high-k), oxidized metal gate dielectric overlying the substrate, the gate dielectric composed of oxide-oxidized Al-oxide; and a control gate formed on top of the gate dielectric.
- 2. (original) The transistor of claim 1 wherein the gate dielectric is a composite oxide high-k dielectric - oxide nanolaminate gate insulator wherein the high-k dielectric is a charge trapping layer formed by low temperature oxidation of metal.
- 3. (canceled)
- 4. (original) The transistor of claim 1 wherein the transistor is used in either a NOR-type flash memory structure or a NAND-type flash memory structure.
- 5. (original) The transistor of claim 2 wherein the charge trapping layer is comprised of a material that has a lower conduction band edge than silicon nitride.
- 6. (currently amended) The transistor of claim 2 wherein the gate dielectric has a larger energy barrier at a between the high-k dielectric and the - oxide insulator interface than at an oxide - high-k dielectric interface silicon dioxide.
- 7 37 (canceled)
- 48. (canceled)